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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/496,563	02/02/2000	Timothy M. Askins	514292000100	6412

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EXAMINER	
CRAIG, DWIN M	
ART UNIT	**PAPER NUMBER**
2123	

DATE MAILED: 02/13/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/496,563	ASKINS ET AL.	
	Examiner	Art Unit	
	Dwin M Craig	2123	

-- Th MAILING DATE of this communication appears on the cover sheet with the correspondenc address --

Peri d for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *02 February 2000* .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-14* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-14* is/are rejected.

7)☒ Claim(s) *14* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *02-02-00* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Pri rity under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) *10* .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

1. Claims 1-14 have been presented for examination. Claims 1-14 have been examined and rejected.

Drawings

2. This application has been filed with informal drawings which are acceptable for examination purposes only. Formal Drawings will be required when the application is allowed. The drawings filed on 02-02-00 are acceptable subject to correction of the formalities listed in the attached "Notice of Draft person's Patent Drawing Review," PTO-948.

Claim Objections

3. **Claim 14** is objected to because of the following informalities: The Claim language contains the following grammatical error, "wherein the at least some of the", this section of the sentence on line 1 of **Claim 14** needs to be re-written. Appropriate correction is required.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. **Claims 1 -14** are being rejected under 35 U.S.C. 103(a) as being unpatentable over **Willis et al. U.S. Patent 5,999,734** in view of **Srivastava et al. U.S. Patent 5,752,034** and in further view of **Bigo et al. U.S. Patent 5,261,099.**

4.1 As regards independent **Claims 1 and 8** the *Willis et al.* reference discloses a computer program product for use with a computer system to execute a simulation, comprising: a plurality of service computer readable program code means, **(Figures 4-7, 10 Item 46, Col. 4 Lines 5-20)** and Object Database **(Figure 4 Item 51, Figure 5-7& 9, Col. 12 Lines 29-45)** computer readable program code means to access and operate upon object attributes, from the object database, with which the service program code means is associated; write queue computer readable program code means associated with each service program code means that queues write requests from the service program code means to write determined simulated attributes to the object database **(Col. 6 Lines 44-60, Col. 7 Lines 9-20, Col. 7 Lines 50-67, Col. 8 Lines 1-9, Col. 8 Lines 40-55)**; and node computer readable program code means that is coordinates execution of the queued requests to cause the determined simulated attributes to be written to the object database in a manner such that each service program code means has a coherent view of all the object attributes **(Figure 8, Col. 7 Lines 33-51).**

The *Willis et al.* reference does not expressly disclose, the service program code means configured to collectively determine simulated attributes of objects of an environment under simulated operation, each service program code means associated with at least a subset of object attributes in an object database and each service program.

The *Srivastava et al.* reference discloses the service program code means configured to collectively determine simulated attributes of objects of an environment under simulated operation, each service program code means associated with at least a subset of object attributes in an object database and each service program **(Figures 2-8, Col. 2 Lines 23-30).**

It would have been obvious to one of ordinary skill in the art, at the time of the invention, to have modified the *Willis et al.* reference with the *Srivastava et al.* reference because *(motivation to combine)* the *Srivastava et al.* reference discloses a method to reduce maintenance costs and information loss ***(Srivastava Col. 5 Lines 49-50).***

The *Willis et al.* reference does not expressly disclose that each service program code means executing at a rate independent of the other service program code means.

The *Bigo et al.* reference discloses that each service program code means executing at a rate independent of the other service program code means **(Figures 3-8, Col. 9 Lines 17-67)**.

It would have been obvious for one of ordinary skill in the art, at the time of the invention, to have modified the *Willis et al.* reference with the *Bigo et al.* reference because *(motivation to combine)* the *Bigo et al.* reference teaches how to transform transient computing overloads into a computing load that is better partitioned over the time without affecting too much the computing load of the processor ***(Bigo et al. Col. 2 Lines 43-46).***

4.1.1 As regards independent **Claim 8** the *Srivastava et al.* reference discloses a computer system **(Figure 1).**

It would have been obvious to one of ordinary skill in the art, at the time of the invention, to have modified the *Willis et al.* reference with the *Srivastava et al.* reference because *(motivation to combine)* the *Srivastava et al.* reference discloses a method to reduce maintenance costs and information loss ***(Srivastava Col. 5 Lines 49-50).***

4.2 As regards **Claims 2 and 9** the *Willis et al.* reference does not expressly disclose a copy constructor.

The *Srivastava et al.* reference discloses the node program code means includes computer readable program code means for creating an image of at least a portion of an object whose attribute is to be written to the object database and for writing the determined simulated attributes to the image; and to write the determined simulated attributes of the object to the object database, the node program code means associates the image with the object database **(Figure 7, Col. 6 Lines 16-65).**

It would have been obvious to one of ordinary skill in the art, at the time of the invention, to have modified the *Willis et al.* reference with the *Srivastava et al.* reference because *(motivation to combine)* the *Srivastava et al.* reference discloses a method to reduce maintenance costs and information loss ***(Srivastava Col. 5 Lines 49-50).***

4.3 As regards **Claims 3 and 10** the *Willis et al.* reference does disclose updating a pointer **(Col. 11, Lines 29-42).**

4.4 As regards **Claims 4 and 11** the *Willis et al.* reference does not expressly disclose notification.

The *Srivastava et al.* reference discloses notification **(Col. 24 Lines 49-67).**

It would have been obvious to one of ordinary skill in the art, at the time of the invention, to have modified the *Willis et al.* reference with the *Srivastava et al.* reference because *(motivation to combine)* the *Srivastava et al.* reference discloses a method to reduce maintenance costs and information loss ***(Srivastava Col. 5 Lines 49-50).***

4.5 As regards **Claims 5 and 12** the *Willis et al.* reference discloses associative software hash tables **(Figure 9 and Col. 12 Lines 10-22).**

4.6 As regards **Claims 6 and 13** the *Willis et al.* reference discloses writing to the objects at the write node **(Figures 7 and 8 and Col. 11 Lines 63-67, Col. 12 Lines 1-9).**

4.7 As regards **Claims 7 and 14** the *Willis et al.* reference does not expressly disclose notification.

The *Srivastava et al.* reference discloses notification **(Col. 24 Lines 49-67).**

It would have been obvious to one of ordinary skill in the art, at the time of the invention, to have modified the *Willis et al.* reference with the *Srivastava et al.* reference because *(motivation to combine)* the *Srivastava et al.* reference discloses a method to reduce maintenance costs and information loss ***(Srivastava Col. 5 Lines 49-50).***

5. **Claims 1 and 8** are being rejected under 35 U.S.C. 103(a) as being unpatentable over **Rompaey et al. U.S. Patent 5,870,588** in view of **Ueno et al. U.S. Patent 5,301,331.**

5.1 As regards **Claims 1 and 8** the *Rompaey et al.* reference discloses a computer program product for use with a computer system to execute a simulation, comprising: a plurality of service computer readable program code means **(Figures 1-3)** and Object Database **(Figure 18, item 186, Col. 31 Lines 4-10)** computer readable program code means to access and operate upon object attributes, from the object database, with which the service program code means is associated; write queue computer readable program code means associated with each service program code means that queues write requests from the service program code means to write determined simulated attributes to the object database **(Figures 1-14)**; and node computer readable program code means that is coordinates execution of the queued requests to cause the determined simulated attributes to be written to the object database in a manner such that each

service program code means has a coherent view of all the object attributes **(Col. 7 Lines 31-67, Col. 8 Lines 1-4).**

The *Rompaey et al.* reference does not expressly disclose that each service program code means executing at a rate independent of the other service program code means.

The *Ueno et al.* reference discloses that each service program code means executing at a rate independent of the other service program code means **(Figures 1-17, Col. 21 Lines 42-67, Col. 22 Lines 1-8).**

It would have been obvious to one of ordinary skill in the art, at the time of the invention, to have modified the *Rompaey et al.* with the *Ueno et al.* reference because *(motivation to combine)* the *Ueno et al.* reference discloses a way to easily construct an interrupt handler ***(Ueno et al. Col. 3 Lines 65-67, Col. 4 Lines 1-2).***

Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dwin M Craig whose telephone number is 703 305-7150. The examiner can normally be reached on 9:00 - 5:00 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kevin Teska can be reached on 703 305-9704. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 746-7239 for regular communications and (703) 746-7238 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703 305-3900.

DMC
January 30, 2003

Russell Frejd
RUSSELL FREJD
PRIMARY EXAMINER